

Capital Planning

INTRODUCTION

Boston's five-year \$1.8 billion capital plan, "Building a Better Boston," is an investment program for the City's future. The underlying framework for the plan emphasizes (1) the strategic use of infrastructure to promote economic development, neighborhood vitality, quality education, health care, and public safety; (2) comprehensive planning to lay the foundation for future growth; and (3) effective government management to deliver necessary municipal services efficiently.

The capital plan is a long-range and flexible planning tool that allows the City to identify long-term goals and projects within a flexible financial framework that can be adjusted as fiscal and other conditions change. The FY16-20 capital plan includes a range of projects that will help keep Boston healthy, thriving, and innovative through major investments in several key areas, including public safety, parks, and community spaces.

The Office of Budget Management (OBM) is responsible for managing the City's capital plan and budget. OBM coordinates the evaluation of capital requests, forecasts the timing and financial requirements of new construction and rehabilitation, and recommends the allocation of current and future resources by monitoring capital expenditures.

FY16-20 EXPENDITURES

Project Highlights

The FY16-20 capital plan anticipates sequencing projects based on available resources (both monetary and personnel), community need, and asset condition. The next five years will see major expenditures in the following areas, sequenced as shown in Figure 1.

Parks: In pursuit of the goal of having the best parks system in the country, the Parks Department will take a whole park, holistic approach to planned park renovations. In the FY16-20 plan, those parks are identified as Langone Park and Puopolo Field in the North End, Marcella Playground in Roxbury, McConnell Park in Dorchester, Medal of Honor Park &

Lee Playground in South Boston, Noyes Park in East Boston, the Penniman Road Play Area in Allston, Roberts Playground in Dorchester, Reservation Road Park in Hyde Park, and Ryan Playground in Charlestown. New projects are also expected to result from the master planning of Harambee Park in Mattapan, Rogers Park in Brighton, and McKinney Playground in Brighton, which are expected to conclude this year.

Another major area of investment for the parks department is in historical parks. Among parks in the Emerald Necklace this includes pathway improvement projects at Franklin Park, Boston Common, and the Public Garden; landscape restoration in Olmsted Park; monument restoration and entranceway improvements at the Johnson Memorial Gates in the Fens; planning for improvements to the pathways around Jamaica Pond; and master plans to help imagine the future of the Boston Common's Frog Pond area, and of an administrative headquarters for the Parks Department at Franklin Park. Several historic park assets outside the Emerald Necklace will also see large-scale improvements; these include John Harvard Mall in Charlestown, Rachel Revere Square in the North End, and building upgrades at George Wright Golf Course Clubhouse in Hyde Park.

The Parks Department is currently wrapping up two major studies that will be used to guide future capital plans: an Asset Study and Accessibility Evaluation, to provide comprehensive information about the state of repair of all Parks assets; and an Open Space Master Plan, which is a City-wide look at future needs and how best to meet them.

Schools: The FY16-20 capital plan continues to show investment in the maintenance of Boston Public Schools assets through programs to improve building envelopes, HVAC systems, roofs, and more. There is also \$20 million set aside in this plan for spending by a future Boston School Building Authority on major renovation projects that are expected to result from the 10 year facilities master plan currently getting underway.

At the same time, the City is moving forward on three new school buildings in partnership with the Massachusetts School Building Authority (MSBA): Construction will begin in FY16 on the new Dearborn 6-12 STEM Academy while separate feasibility studies will begin for the Josiah Quincy Upper School and for the Boston Arts Academy.

Additionally, a major renovation is proposed for the Carter Center, a facility that serves students with severe disabilities and complex health needs. The renovation will include a pool for aquatic therapy and other program space.

Public Safety: The facility program for a new police station for East Boston is currently being studied and potential locations will be evaluated. That project is expected to go into design and construction during this five-year plan. The Fire Department will begin a system-wide programming study that will inform the renovations of two fire stations, and the replacement of two others, over the next five years. The Police Department will overhaul their radio system. A search is being conducted for a site for a new Emergency Operations Center; once a suitable site is found, design and construction could begin for that, as well.

Streets: Several new initiatives this year will focus on improving safety and mobility for cyclists, pedestrians, and drivers. The City will invest \$6 million in smart parking meters, which will accept mobile payments and credit cards as well as coins; provide real-time data to the Boston Transportation Department to help manage parking policies; and could allow the City to pursue dynamic pricing as a parking demand-management strategy at a later date. The programs to address safety concerns include the cross-agency "Vision Zero" effort to eliminate pedestrian fatalities; the Neighborhood Safety program to redesign intersection so as to make them safer for pedestrians; and the Walkable Streets program which will take a more holistic look at pedestrian access than the current sidewalk reconstruction program by focusing on reconstructing long, contiguous areas of sidewalk.

A series of ongoing annual programs are expected to reconstruct six lane-miles of roadway and 400,000 square feet of sidewalk, resurface 40 lane-miles of roadway, install 15 miles of bike lanes and 1,000 ADA/MAAB-compliant pedestrian ramps, and install 7,000 LED lights to in FY16. The reconstruction program includes several large-scale, significant projects, including the \$29m Connect Historic Boston program, funded in part with a federal grant; Seaver

Street along the northern edge of Franklin Park in Roxbury; and a redesigned Central Square in East Boston.

Innovation and Technology: This five-year plan includes a large investment to expand Boston's fiber optic network, which will provide greater connectivity to schools, provide the backbone of the City's free WiFi expansion, and possibly lead to operational cost savings if it can replace leased lines currently used for public safety communications and other systems. The capital plan will also support increased investments in tools for digital engagement of the public, such as a new public website; and for data access, data warehousing, reporting and visualization that will allow City agencies and members of the public to better understand trends in education, transportation, city services, and more.

Community Spaces: This five-year plan includes full renovations to four BCYF community centers: the Paris Street Community Center and Paris Street Pool in East Boston, the Vine Street Community Center in Roxbury, and the Clougherty Pool in Charlestown. A new roof, gym floor, and air conditioning are in currently in design for the Gallivan Community Center in Mattapan.

Full-scale renovations for seven branch libraries are included in this plan: Jamaica Plain, Dudley Square, Roslindale, Adams Street, Egleston Square, and North End. A new branch library for Uphams Corner is anticipated, once a suitable location is found. Additionally, the major renovation of the Johnson Building at the Central Library will conclude in summer 2016.

FY16-20 PROJECT HIGHLIGHTS AND SEQUENCING

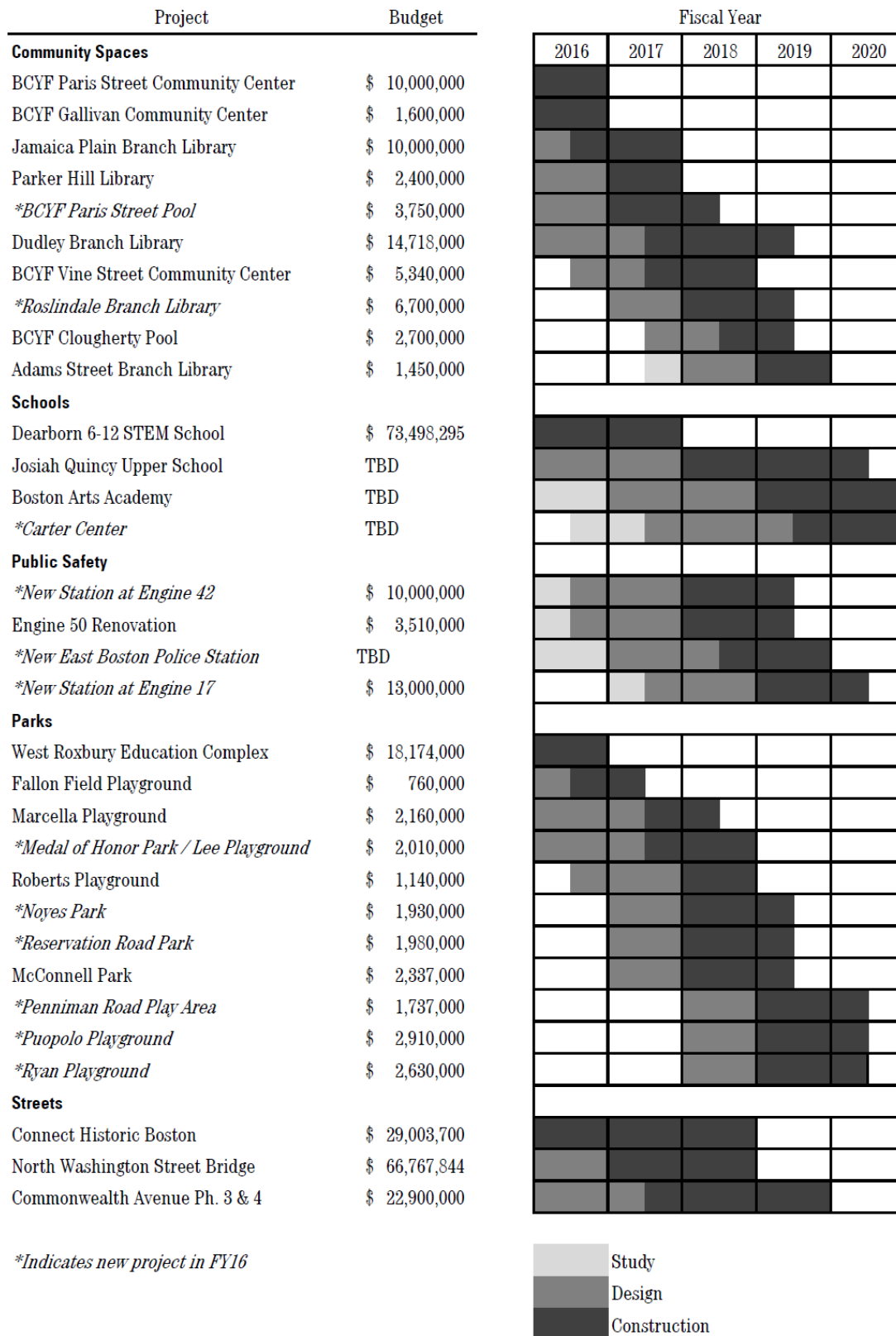


Figure 1

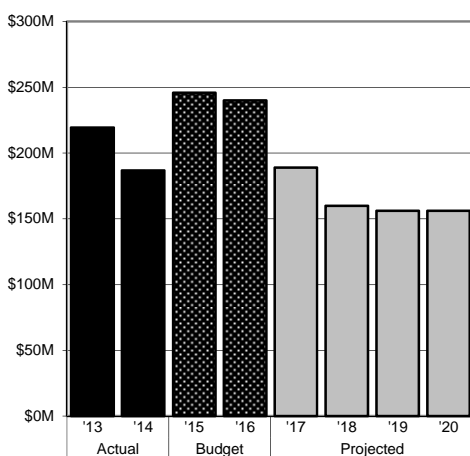
FY16 Expenditure Allocation

The City estimates FY16 capital expenditures will total \$240 million from all sources, slightly less than the FY15 estimate of \$245.7 million (see Figure 2) which includes \$27.7 million for the now occupied Bruce C. Bolling Building in Dudley Square.

All projects in the capital plan are categorized as Upkeep, New/Major Renovation, Upgrade, Planning or Matching Funds. OBM tracks the overall distribution of these categories to maintain a balance between the upkeep of existing assets and the expansion or introduction of new ones.

Upkeep: Upkeep represents projects that maintain the City's assets, a fundamental priority of the Capital Plan. In FY16, 49% of projected spending supports Upkeep projects. These include roof and masonry repairs, the replacement of play equipment in parks, HVAC and boiler replacement, and critical repair funds for departments to address relatively small but vital repair projects not covered by routine maintenance. A substantial portion of the Upkeep category supports on-going bridge, street, sidewalk, and street lighting repairs that ensure the City's roads and sidewalks are safe and in good condition.

Upgrade: Upgrade represents projects that improve existing assets by adding new capacity or innovations. This year's upgrade allocations account for 29% of projected spending, and includes projects such as Connect Historic Boston – the redesign of several Downtown streets with support from a Federal grant – and new equipment for the police radio system.



Capital Expenditures
FY13- FY20

Figure 2

FY16 EXPENDITURES: PROJECT HIGHLIGHTS

In Construction

Parks

John Harvard Mall
Fallon Field Playground
Marcella Playground

Schools

Dearborn 6-12 STEM / Early College Academy
Eliot School expansion
Fenway High School

Streets

Vision Zero / Neighborhood Safety
Walkable Streets
Connect Historic Boston

Innovation and Technology

Digital Engagement Upgrades

Community Spaces

Jamaica Plain Branch Library Renovation
Paris Street Community Center Renovation
Gallivan Community Center Upgrades

Public Health

Homeless Shelter

In Design

Parks

Roberts Playground
Medal of Honor Park / Lee Playground

Schools

Carter Center Expansion
10-Year Facilities Master Plan

Public Safety

New A-7 Police Station
Engine 50 Renovation

Community Spaces

Dudley Square Branch Library Renovation
Paris Street Pool Renovation

New/Major Renovation: 13% of the FY16 allocations represent major renovations and new buildings. New facilities and rehabilitation projects for schools, libraries, parks and community centers enable the City's facilities to adapt to fit the needs of today's programs, improve the 'green' performance of facilities, and extend the useful life of older assets. Highlights in this category include upgrades to BPS's Carter Center, and a new fire houses at Engine 42 in Roxbury.

Planning or Matching Funds: About 9% of the FY15 budget is assigned to matching fund requirements and to planning projects. Comprehensive planning projects, which analyze a group of buildings or program needs, provide the groundwork for targeted investments in the categories of Upgrade and New/Major Renovations. Projects in this category include the 10-year mast plan for school facilities, a programming study to determine the space needs for modern fire stations, and planning money for the construction of a new North Washington Street bridge, which will help leverage state construction funds.

FINANCING THE FY16-FY20 CAPITAL PLAN

The capital plan is financed with general obligation bonds, state and federal funds, trust funds, and other funds.

General Obligation (G.O.) Bonds

General obligation bonds represent 67.8% of all project funding. This year's plan assumes \$700 million in new general obligation borrowings over the next five years to support ongoing capital needs.

State and Federal Funds

State and federal financing programs, such as the School Building Assistance program, Chapter 90 and the Transportation Improvement Program, provide key resources for Boston's capital plan. Funds for capital financing are currently estimated at \$280 million from state programs and \$219 million from federal programs.

School Building Assistance Program

The School Building Assistance (SBA) program, administered by the Massachusetts School Building Authority (MSBA), is an important revenue source for school renovation and construction. Annually, the MSBA accepts new project requests from cities, towns,

and school districts, and if a project is ultimately approved, the MSBA will pay 40% to 80% of eligible project costs.

The City entered into a Project Funding Agreement with the MSBA to build a new school on the site of the existing Dearborn School in Roxbury. The new school will have a STEM-focused curriculum (Science, Technology, Engineering, and Math), and will serve grades 6 to 12. The MSBA will provide a maximum project grant totaling \$37.4 million or 50.8% of total projects costs.

Two other City projects are currently in the MSBA's process. A feasibility study is about to begin for the Josiah Quincy Upper School. The schedule calls for a preferred option to be selected as early as spring 2016. The Boston Arts Academy project is in the Eligibility Period of MSBA's process. This time is used to secure local funding for the feasibility study, determine an enrollment figure, and other pre-study activities. Once these tasks are completed the City expects to enter into a Feasibility Study Agreement with the MSBA and begin the study.

In February, 2015 the City submitted Statements of Interest (SOI) for seven window replacement projects for the MSBA's Accelerated Repairs Program. This program funds roof, boiler and window replacement projects. These projects are not reflected in the proposed capital plan however, if the MSBA selects any or all of the projects, the City will have ninety days to secure project funding for a feasibility study and schematic design.

For the period FY16-20, total payments from the MSBA are estimated at \$28.4 million to offset debt service costs for projects previously approved by the MSBA.

Chapter 90 Funds

Administered by the Massachusetts Highway Department, Chapter 90 funds are allocated by formula through state bond authorizations and through the state budget to all cities and towns in the Commonwealth. The City uses Chapter 90 allocations to fund road resurfacing and reconstruction projects as well as sidewalk reconstruction projects. The City expects an allocation of approximately \$14 million in FY16, which will be used for major roadway reconstruction projects including Connect Historic Boston and Seaver Street, for the annual sidewalk and resurfacing program, and for a pavement preservation

program that will use inexpensive interventions on deteriorating roadways in order to postpone more costly resurfacing.

Transportation Improvement Program (TIP)

The Transportation Improvement Program is a statewide road and bridge construction advertisement program developed under the management of the Massachusetts Department of Transportation (MassDOT). It includes both local and state owned roads and bridges. The TIP's funding sources include state-issued general obligation bonds and federal funds made available through the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Trust Funds

The City's Treasury Department manages trust funds and bequests from private citizens dedicated to Boston's public spaces. Grants from the Edward Ingersoll Browne Trust Fund are used for the enhancement of neighborhood parks, schoolyards, and public spaces. The George Robert White Fund supports facilities owned by the Fund.

Other Funds

The City uses funds from the Street Opening Account to finance the permanent repair of utility cuts and pavement restoration. Occasionally, private parties contribute to roadway construction or other capital projects, as is the case with Everett Street (in partnership with Harvard University) and Connect Historic Boston (in partnership with the federal General Services Administration, and several private developers near North Station. Other funds also include rebates provided by utilities as an incentive to carry out energy efficiency projects, appropriations from the City's Surplus Property Fund and transfers from the City's Parking Meter Fund. Altogether, these sources of capital funds are estimated at \$76 million.

CAPITAL PLANNING PROCESS

Capital needs and resource availability are assessed annually through a capital planning process that results in a five-year capital plan. The first year of the spending plan constitutes the City's capital budget. Expenditures against this budget are closely monitored throughout the year. To emphasize the balance between needs and resource availability, the budget document (in Volumes II and III) includes

both capital authorizations and expenditure projections for each project.

The annual capital planning process begins with a capital improvement project request period during which all departments have an opportunity to identify their facility, equipment, infrastructure, and planning needs in a systematic manner and to submit their proposals to OBM for funding consideration. The development of department project requests may involve both internal assessments of current needs and a review of external constituent requests.

All capital improvement projects requesting funding consideration must meet at least one of the following minimum criteria:

- Complies with Americans with Disabilities Act;
- Improves health and safety;
- Supports economic development;
- Enhances general government effectiveness;
- Mitigates an environmental hazard;
- Responds to a legal, legislative or administrative mandate; or
- Preserves existing municipal facilities.

A project request includes a cost estimate, a description of the proposed scope of work, and additional descriptive information to help OBM evaluate it.

Proposed projects must account for short-term and long-term effects on the City's operating budget. Accordingly, project requests that OBM determines may impact the City's operating budget are subject to additional review to determine the anticipated effect on personnel, utilities, maintenance, and supply costs as well as expected changes in service demand or delivery of departmental programs. As a practical matter, it is assumed that certain types of projects such as energy conservation and energy efficiency projects (e.g. heating system upgrades or roof and window replacements) provide operating budget savings. OBM works with departments to measure these savings.

OBM reviews project proposals to determine the extent to which private purposes or benefits may exist; this review allows the City of Boston to maintain its tax-exempt financing status.

New capital requests that are recommended for funding are placed into a multi-year spending plan along with previously authorized projects. The Mayor submits the capital plan to the City Council each year. The City Council in turn, holds public hearings to consider project authorizations. This year's capital plan identifies 333 new and continuing projects and proposes \$151 million in new project authorizations.

Descriptions of all 333 projects can be found in Volumes II and III of the Budget. Project descriptions include authorizations and funding sources, projected expenditures, scope of work summary, and an indication of whether or not the project generates a near-term operating budget impact.

Operating Budget Impacts

Determining the impact that proposed capital investments will have on the City's operating budget (personnel, contracted services, equipment and utilities) is essential to the capital budgeting process. Many capital projects, such as those that replace mechanical equipment with modern, more efficient versions, save the City money in future operating costs; others, such as those that allow the City to expand programming or establish a stronger presence in different neighborhoods, may entail future operating costs. Understanding the balance between future savings and future costs resulting from these capital projects is vital to maintaining the City's long-term financial health.

Figure 3 shows a list of those capital projects in the FY16-20 plan that are expected to have a near-term

impact on the City's operating budget, and what that impact is expected to be. In Volumes II and III of this document, each capital project summary indicates whether or not there is an operating impact associated with the project.

While most capital projects can be assumed to have a marginal impact on energy savings or personnel demands, only those projects which will likely result in an increase or decrease in a budget appropriation are included here.

Savings

The capital plan supports investments that will decrease operating expenses by reducing costs associated with emergency repairs, maintenance of old systems, and energy inefficiency. A substantial portion of the capital plan is focused on these types of basic facility improvements.

Through an Executive Order relative to climate action, the City has committed to designing new buildings and selected major renovations to the standards required to attain U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) certification.

By far the largest operational savings comes from the conversion of street lights to newer fixtures using Light Emitting Diode (LED) technology. Starting in FY11, and initially taking advantage of funds from the American Recovery and Reinvestment Act (ARRA) as well as rebates from NSTAR, the street lights converted under this program in FY16 are expected to save the City \$1 million annually, in addition to the \$3

Department	Project	2016	2017	2018
Boston Center for Youth and Families	BCYF Paris Street Community Center	-	(4,300)	4,300
Boston Center for Youth and Families	BCYF Vine Street Community Center	-	-	(1,994)
Fire Department	HVAC / Boiler Replacement at Various Stations	(29,348)	(29,348)	(29,348)
Library Department	Central Library Energy Improvements	(11,500)	(11,500)	(11,500)
Library Department	Critical Facility Repairs	(19,916)	(19,916)	(19,916)
Library Department	Central Library Renovation: Johnson Building	(41,750)	(83,500)	83,500
Department of Innovation and Technology	Core Technology Infrastructure	635,000	735,000	735,000
Department of Innovation and Technology	Youth and Human Services Initiatives	-	65,000	65,000
Department of Innovation and Technology	Public Safety Systems Implementation	-	150,000	150,000
Department of Innovation and Technology	Computer Aided Dispatch	600,000	600,000	600,000
Department of Innovation and Technology	Enterprise Business Applications	70,000	70,000	70,000
Department of Innovation and Technology	Tax Billing and Collecting System	25,000	300,000	300,000
Department of Innovation and Technology	Fiber Network Expansion	-	75,000	575,000
Property and Construction Management	City Hall Energy Efficiency	(141,527)	(141,527)	(141,527)
Property and Construction Management	Eliot School at North Bennet Street	-	65,433	65,433
Public Works Department	Central Maintenance Facility Vehicle Wash	2,000	2,000	-
Public Works Department	Street Light LED Conversion	(1,000,000)	(1,000,000)	-
Public Works Department	Street Light Gas Lamps	(50,000)	(50,000)	-
Public Works Department	Strategic Bicycle Network Project	150,000	150,000	-

Figure 3: Operating Impacts of Capital Projects

million projected annual savings from work done in prior years.

Property and Construction Management is converting the City Hall heating system from steam to natural gas. The existing steam to water heat exchanger will be replaced with four high-efficiency gas-fired condensing boilers. The School Department and Fire Department are both pursuing capital projects to save energy and reduce operating costs, primarily by replacing boilers and updating HVAC and associated systems.

Costs

Increases in operating expenses expected as a result of capital projects are primarily driven by two areas: an expansion of the City's IT infrastructure and the addition of buildings to the City's portfolio.

Although many of the projects identified in the Department of Innovation and Technology (DoIT)'s capital budget are replacing legacy systems, in many cases they involve an expansion of that infrastructure, as well. This entails annual licensing fees to support the ongoing maintenance and upgrades of the new software solutions, and often the addition of personnel to support the customizations and integrations that allow the new software to meet the City's needs. Although it is expected that most of this new software will result in operational efficiencies, those efficiencies have been difficult to quantify in a way that can be accurately reflected in the City's budget projections.

Only one new building is expected to come on line in the next three years: an expansion of the Eliot school into the former North Bennet Street School. The operating costs for the Eliot school assume that the entire building will consist of net new seats for K-8 students, although a system-wide needs assessment for such seats will be part of the School Department's 10-year facility master plan.

DEBT MANAGEMENT POLICIES AND DEBT IMPLICATIONS OF THE PLAN

Effective debt management ensures that the City can meet its capital infrastructure and facility needs. Debt management requires a series of decisions about the amount, timing, purposes and structure of debt issuance. Long-term debt related to capital investment has two main purposes:

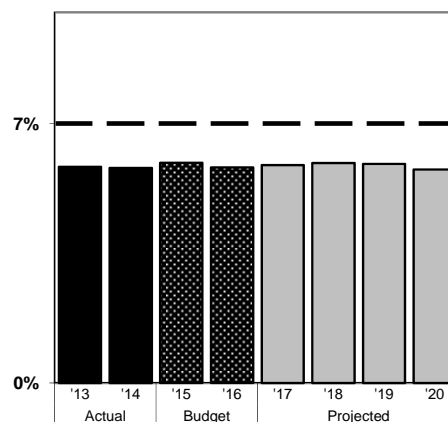
- (1) It finances acquisition, construction, repair, and renovation of City-owned buildings and equipment that are necessary to provide public services; and
- (2) It finances infrastructure improvements to ensure the City's continued growth and safe roadway conditions.

The Treasury Department manages all borrowings according to the City's debt management policies. These policies address issues such as debt affordability and limitations on the level of variable rate debt the City will use. The City's goals are to rapidly repay debt, maintain a conservative level of outstanding debt, and ensure the City's continued positive financial standing with the bond market.

Key components of the debt management policies ensure that:

- combined net direct debt does not exceed 3% of taxable assessed value;
- at least 40% of the overall debt is repaid within five years and 70% within ten years;
- annual gross debt service costs do not exceed 7% of general fund expenditures;
- variable rate debt does not exceed 20% of the City's total currently outstanding bonded debt (the City has no variable debt).

For further discussion of the City's financial policies and management controls, refer to the chapter on Financial Management.



Gross Debt Service as a Percent of Total General Fund Expenditures
FY13 - FY20

Figure 4

The City's debt service forecast assumes general obligation borrowing of \$140 million in FY16, and \$140

million each year from FY17 through FY20. On March 10, 201, the City sold \$140 million in general obligation bonds to fund its capital improvement projects, and \$126.7 million in general obligation refunding bonds. The debt tables at the end of this chapter detail the City's outstanding debt service obligations and demonstrate the City's rapid retirement of its debt.

The City's gross debt service requirement will remain under 7% of total General Fund expenditures through FY20 (See Figure 4).

The ratio of debt service to the City's primary revenue source, the property tax levy, is projected to increase through FY17 (See Figure 5). Even with the increase, the ratio is not expected to exceed the City's policy ceiling.

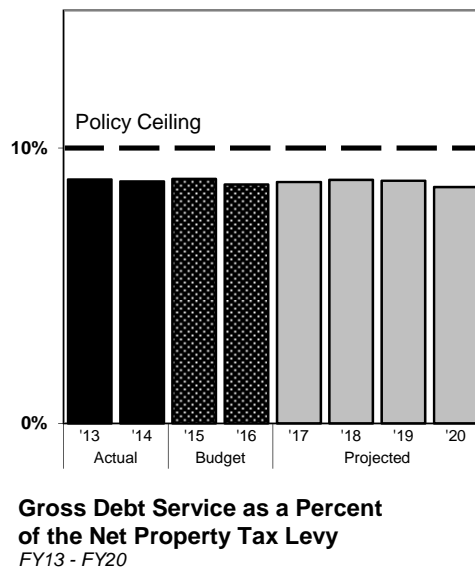


Figure 5

The City's current overall debt burden (net direct debt to assessed property value of \$110.74 billion) is approximately 1.06% as of April 30, 2015. The City's net direct debt per capita currently stands at approximately \$1,819.64 as of April 30, 2015.

Boston has been conservative about assuming long-term debt and aggressive about retiring debt expeditiously. As of April 30, 2015, the City's debt retirement schedule shows that 40.9% of its principal will be retired five years out, before the end of FY20 (See the Debt Retirement table at the end of this chapter).

In March of 2015, Moody's Investors Service and Standard & Poor's reaffirmed Boston's credit rating at Aaa, and AAA, respectively. A bond rating is a

statement of credit quality and is analyzed when determining the interest rate that should be paid for a municipality's bonds. A higher bond rating translates into lower interest rates and real dollar savings for the City.

Capital Project Financing

Fiscal Years 2016 - 2020

	Existing Authorization	FY16 Authorization	FY17-20 Authorization	State	Federal	Other	Trust	Total
Boston Center for Youth and Families	20,136,845	1,550,000	11,654,843	0	0	0	0	\$33,341,688
Boston Redevelopment Authority	9,987,500	6,725,000	0	1,583,500	0	3,500,000	0	\$21,796,000
Department of Innovation and Technology	84,155,744	18,340,000	3,750,000	0	0	0	0	\$106,245,744
Emergency Management	1,500,000	0	0	0	2,000,000	0	0	\$3,500,000
Environment Department	0	445,000	0	0	0	0	0	\$445,000
Fire Department	38,318,000	5,630,000	33,127,500	0	0	89,091	0	\$77,164,591
Library Department	100,439,168	5,130,000	37,428,000	0	0	183,079	0	\$143,180,247
Neighborhood Development	200,000	2,078,000	0	0	0	1,750,000	0	\$4,028,000
Office of New Urban Mechanics	400,000	0	0	0	0	0	0	\$400,000
Parks and Recreation Department	68,908,057	13,518,000	30,758,307	16,926,056	62,200,086	1,870,926	0	\$194,181,432
Police Department	7,485,000	15,174,000	0	0	0	0	0	\$22,659,000
Property and Construction Management Department	27,892,983	20,277,100	29,242,000	117,227	0	1,043,232	0	\$78,572,542
Public Health Commission	28,866,000	425,000	55,000	0	0	0	0	\$29,346,000
Public Works Department	240,663,279	42,650,000	4,000,000	204,694,519	149,087,704	38,771,933	0	\$679,867,434
School Department	157,580,599	12,156,000	75,396,408	38,509,642	0	21,890,000	0	\$305,532,649
Transportation Department	41,565,291	7,198,938	7,700,000	18,520,000	5,480,000	6,700,000	0	\$87,164,229
Total	828,098,466	151,297,038	233,112,058	280,350,943	218,767,790	75,798,261	0	1,787,424,556

City of Boston
Outstanding Principal by Statute as of April 30, 2015

Statute:		Outstanding @ April 30, 2015	Percent of Total Outstanding Debt
<u>General Purpose:</u>			
C44 s7 (13)	Acquisition of Fire or Police Boats	1,884,441	0.154
C44 s7 (20)	Acquisition of Land; Cemeteries	389,426	0.032
C44 s7 (21)	Architectural Services for Plans & Specs	205,480	0.017
C44 s7 (22)	Engineering or Architectural Services	5,790,634	0.473
C44 s7 (25)	Acquisition of Land; Parks and Playgrounds	81,103,684	6.628
C44 s7 (28)	Computer Hardware	56,912,871	4.651
C44 s7 (29)	Computer Software	10,920,286	0.892
C44 s7 (9)	Departmental Equipment	7,748,317	0.633
C44 s7 (3B)	Energy Conserv., Alternative Energy Improvements	3,235,800	0.264
C659 Acts 1986	BCH - Constr., Equipping, Furnishing	18,425,000	1.506
		\$ 186,615,939	15.251
<u>Urban Development:</u>			
C121B s20	Urban Redevelopment and Renewal	\$ 8,138,300	0.665
C1097 s11 Acts 1971	Economic Development and Industrial Corp.	5,998,282	0.490
		\$ 14,136,582	1.155
<u>Schools:</u>			
C645 s8 Acts 1948	School Project Loan	\$ 30,715,292	2.510
C642 s7B Acts 1991	Capital Improvements; Act of 1991	1,457,573	0.119
C642 s7C Acts 1996	Capital Improvements; Act of 1996	8,349,121	0.682
		\$ 40,521,986	3.312
<u>Public Buildings:</u>			
C44 s7 (3)	Construction of Buildings; Acquisition Of Land	\$ 221,262,030	18.082
C44 s7 (3A)	Remodeling and Extraordinary Repairs	534,172,702	43.653
C152, Act '97	Convention Center Refunding Bond	31,060,000	2.538
C642 s7A Acts 1973	Capital Improvements; Act of 1973	6,263,017	0.512
C642 s7B Acts 1991	Capital Improvements; Act of 1991	303,709	0.025
C642 s7C Acts 1996	Capital Improvements; Act of 1996	20,515,024	1.677
		\$ 813,576,481	66.487
<u>Public Works:</u>			
C44 s7 (1)	Construct/Re-Construct of Surface Drains, Sewers, etc.	\$ 1,726,460	0.141
C44 s7 (4)	Construction and/or Re-Construction of Bridges	49,789,076	4.069
C44 s7 (5)	Construction of Public Ways	49,785,812	4.069
C44 s7 (6)	Construction of Sidewalks	4,440,552	0.363
C44 s7 (7)	Construction of Walls or Dikes	85,904	0.007
C44 s7 (14)	Traffic Signal and Public Lighting Install., etc.	53,456,852	4.369
C44 s8 (4)	Reservoir Constr./Enlrg; Water Trmt Bldgs	920,846	0.075
C44 s8 (5)	Water Mains Laying, Re-Laying, Construct.	3,862,750	0.316
C44 s8 (7A)	Water Meter Purchase & Installation	88,362	0.007
C44 s8 (7C)	Water Dept. Equip.; Purchase, Replace., Rehab.	665,358	0.054
C44 s8 (24) C29C	Landfill; Closing, Opening, Improve. to (MWPA T)	3,997,040	0.327
		\$ 168,819,013	13.796
Grand Total = \$		1,223,670,000	100.00 %

CITY of BOSTON
BOND - GROSS DEBT SERVICE PAYMENTS
@ April 30, 2015

- Stated in Five Year Intervals -
(\$ in thousands)

DATE of ISSUE	TYPE	AMOUNT ISSUED	FY'15 through FY'20		FY'21 through FY'25		FY'26 through FY'30		FY'31 through FY'35		FY'15 through FY'35	
			Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
April 1, 2015	GO	140,000	35,925	26,198	39,460	16,881	31,890	8,327	32,725	3,150	140,000	\$54,556
April 1, 2015	REF	126,735	36,510	26,325	55,085	16,189	35,140	3,235	0	0	\$126,735	\$45,749
March 26, 2014	GO	119,085	37,015	21,451	32,005	12,639	24,650	6,302	18,215	1,857	\$111,885	\$42,249
March 26, 2014	GO/Dudley	33,915	6,135	6,431	7,835	4,736	9,665	2,904	9,125	930	\$32,760	\$15,001
March 14, 2013	GO	109,095	32,840	17,514	28,145	9,528	21,735	4,389	13,780	835	\$96,500	\$32,266
March 14, 2013	GO/Dudley	35,760	6,805	6,084	8,680	4,205	10,625	2,256	7,295	442	\$33,405	\$12,987
March 14, 2013	REF	24,380	50	3,645	18,180	2,451	2,400	96	0	0	\$20,630	\$6,192
October 12, 2012	GO/Dudley	28,865	5,845	3,891	7,085	2,655	8,330	1,409	5,585	255	\$26,845	\$9,210
May 4, 2012	BCH REF	26,945	18,425	1,810	0	0	0	0	0	0	\$18,425	\$1,810
April 2, 2012	GO	121,975	40,985	17,210	28,625	8,442	19,515	3,745	7,885	476	\$97,010	\$29,873
April 2, 2012	REF	83,155	38,310	10,231	16,560	1,892	0	0	0	0	\$54,870	\$12,123
April 1, 2011	Conv Ctr Ref	38,295	11,050	5,458	13,785	2,717	6,225	376	0	0	\$31,060	\$8,551
April 1, 2011	GO	86,190	26,005	10,787	17,115	5,428	14,470	2,421	3,105	132	\$60,695	\$18,768
April 1, 2011	QSCB	41,620	3,920	8,847	29,735	6,280	7,965	350	0	0	\$41,620	\$15,477
April 1, 2011	REF	14,425	2,880	115	0	0	0	0	0	0	\$2,880	\$115
April 1, 2010	QSCB	17,415	0	4,423	13,935	3,395	3,480	184	0	0	\$17,415	\$8,002
April 1, 2010	REF	68,345	42,940	7,919	13,310	827	0	0	0	0	\$56,250	\$8,746
April 1, 2010	RZEDB	16,685	11,435	2,635	3,210	987	2,040	326	0	0	\$16,685	\$3,948
April 1, 2010	BAB	30,905	0	7,505	15,350	6,163	15,555	2,490	0	0	\$30,905	\$16,158
April 1, 2010	GO	39,995	12,165	1,952	760	173	555	61	0	0	\$13,480	\$2,186
November 4, 2009	QSCB	20,000	0	0	20,000	0	0	0	0	0	\$20,000	\$0
May 27, 2009	REF	31,485	11,565	892	0	0	0	0	0	0	\$11,565	\$892
March 18, 2009	GO	100,000	21,335	2,732	0	0	0	0	0	0	\$21,335	\$2,732
March 18, 2009	REF	8,940	8,910	1,212	0	0	0	0	0	0	\$8,910	\$1,212
March 20, 2008	GO	126,185	20,015	2,034	0	0	0	0	0	0	\$20,015	\$2,034
March 22, 2007	GO	100,000	11,770	2,504	0	1,613	9,220	487	0	0	\$20,990	\$4,604
March 22, 2007	REF	85,425	49,625	11,988	33,000	1,409	0	0	0	0	\$82,625	\$13,397
January 31, 2006	GO	80,000	4,110	205	0	0	0	0	0	0	\$4,110	\$205
October 15, 1999	MWPAT	13,389	4,065	523	0	0	0	0	0	0	\$4,065	\$523
			\$500,635	\$212,521	\$401,860	\$108,610	\$223,460	\$39,358	\$97,715	\$8,077	\$1,223,670	\$368,566
				\$713,156		\$510,470		\$262,818		\$105,792		\$1,592,236

% of Total Principal and
Interest Retired in 5 Years:

40.9%

% of Total Principal and
Interest Retired in 10 Years:

73.8%

% of Total Principal and
Interest Retired in 15 Years:

92.0%

% of Total Principal and
Interest Retired in 20 Years:

100.0%

CITY OF BOSTON - DEBT SERVICE REQUIREMENTS - FISCAL YEARS 2014 through 2020

Gross Debt Service Requirements - Bonded Debt:

	Actual FY14	Projected FY15	Projected FY16	Projected FY17	Projected FY18	Projected FY19	Projected FY20
Total Principal:	104,395,000.00	107,660,000.00	110,590,000.00	118,440,000.00	124,420,000.00	129,295,000.00	129,890,000.00
Total Interest:	49,144,539.77	54,879,592.46	55,497,597.89	56,357,579.90	57,135,518.19	57,953,950.35	58,705,466.25
(1) Total:	153,539,539.77	162,539,592.46	166,087,597.89	174,797,579.90	181,555,518.19	187,248,950.35	188,595,466.25
Boston Medical Center	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston Public Health Commission	211,477.71	182,393.13	0.00	0.00	0.00	0.00	0.00
Water and Sewer Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(2) Premium, Subsidies, Other	10,322,202.30	8,520,908.96	3,651,497.00	3,584,191.94	3,502,660.51	3,418,863.47	3,308,755.72
Accrued Interest	0.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00
(3) Irrigation Project	214,914.96	206,501.24	199,022.83	190,284.93	116,364.90	9,149.49	0.00
(4) 1010 Massachusetts Avenue Project	1,886,303.56	2,285,655.98	2,265,029.18	2,220,936.61	2,168,216.83	1,947,260.57	1,916,238.83
(5) Pension Management System	1,858,098.43	1,858,296.67	1,859,214.08	1,859,140.89	1,857,900.22	1,857,301.62	1,857,938.96
Interest on Loan to BOA Fund and Dudley Fund	0.00	146,664.50	0.00	0.00	0.00	0.00	0.00
(6) Room Occupancy Excise Fund	3,300,375.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Debt Service/Budget Summary:	137,844,222.00	152,133,217.42	164,415,380.24	173,245,570.97	180,212,921.17	185,857,420.64	187,353,578.18

Additional Adjustments:

Less:							
School Construction Assistance	8,474,584.00	8,175,513.00	7,344,337.00	6,720,152.00	6,720,147.00	5,107,351.00	2,461,330.00
Total Net Debt Service Requirements:	129,369,638.00	143,957,704.42	157,071,043.24	166,525,418.97	173,492,774.17	180,750,069.64	184,892,248.18

NOTES:

- (1) FY15 - the City issued:
\$140 million in General Obligation Bonds with a 20-year maturity and an average coupon rate of 4.18%; closing date: April 1, 2015.
This issuance includes \$5.7 million issued for the Dudley Project.
\$126.7 million in General Obligation Refunding Bonds with a 14-year maturity and an average coupon rate of 4.57%; closing date: April 1, 2015.
- Assumptions:
- FY16 - Assumes General Obligation debt issuance of \$140 million, with a 20 year maturity and an interest rate of 4.25 %.
- FY17 and FY18 - Assumes General Obligation debt issuance of \$140 million per year, each with a 20 year maturity and an interest rate of 4.75 %.
- FY19 and FY20 - Assumes General Obligation debt issuance of \$140 million per year, each with a 20 year maturity and an interest rate of 5.00 %.
- (2) An estimated Subsidy reduction to ARRA-related issuances of 7.3% per year from FY2016 through FY2020 has been applied in response to IRS withholding notifications.
- (3) Debt Service Costs will be offset by the "Fund for Parks and Recreation".
- (4) Debt Service Costs will be offset by charging City departments for the space they occupy.
- (5) Debt Service Costs will be offset by semi-annual payments from the Retirement Board.
- (6) On April 1, 2011, the City refunded the remaining balance of the April 15, 2002 Special Obligation Bonds for the Convention Center.
Pledged revenues will be dedicated to the repayment of the debt service.

<p align="center">CITY of BOSTON RATE of PRINCIPAL RETIREMENT on GENERAL OBLIGATION BONDS</p>

Fiscal Years Ending June 30, 2015 - 2035
@ APRIL 30, 2015

<u>Fiscal Year Ended June 30,</u>	<u>Amount</u>	<u>Percentage of Total Principal Amount Retired:</u>
@ 4/30/15		
2015 - 2020	\$ 500,635,000.00	40.91 %
2021 - 2025	401,860,000.00	32.84 %
2026 - 2030	223,460,000.00	18.26 %
2031 - 2035	97,715,000.00	7.99 %
	<u>\$ 1,223,670,000.00</u>	<u>100.00 %</u>